LISTING OF CLAIMS:

Claim 1 (Previously presented): A torque transducer assembly comprising:

a housing having an opening therethrough;

a torque transmission shaft extending in said opening and rotatable about an axis extending through said opening, said shaft having respective end portions accessible from exteriorly of said housing ;

a torque transducer element integral with, or carried by, said shaft to emanate a magnetic field dependent on the torque in the shaft;

a magnetic field sensor arrangement located within said housing adjacent said element for sensing the torque-dependent field, said sensor arrangement being operable to provide a torque-dependent signal; and

means for communicating said torque-dependent signal to a signal externally of the assembly.

Claim 2 (Original): A torque transducer assembly as claimed in Claim 1 in which one end portion of said shaft projects exteriorly of said housing and provides an output portion of the shaft.

Claim 3 (Previously presented): A torque transducer assembly as claimed in Claim 1 in which said housing is configured to enable it to be secured against rotation.

Claim 4 (Previously presented): A torque transducer assembly as claimed in Claim 3 further comprising a member having a first portion engaged with the housing and a second portion engageable with the body of a power torque tool to secure the housing against rotation with respect to said body.

Claim 5 (Original): A torque transducer assembly as claimed in Claim 4 in which said member comprises a helical spring.

Claim 6 (Previously presented): A torque transducer assembly as claimed in claim 1 in which said magnetic field sensor arrangement comprises at least one magnetic field sensor

device.

Claim 7 (Previously presented): A torque transducer assembly as claimed in Claim 6 in which said magnetic field sensor arrangement further comprises a circuit into which the at least one magnetic field sensor device is connected, the circuit and the at least one magnetic field sensor device being supported by said housing, the circuit being operable to output signals representing torque through the means for communicating.

Claim 8 (Previously presented): A torque transducer comprising a torque transducer assembly which as claimed in claim 1 further comprising a signal processing unit in communication with said torque transducer assembly for processing said torque-dependent signals, wherein said signal processing unit is operable to process pulse signals representing pulses of torque and is responsive to the amplitude of each pulse signal with reference to the quiescent signal level on which it is imposed.

Claim 9 (Previously presented): A torque transducer as claimed in claim 7 wherein the means for communication utilizes a wire-less (free of wire connection) form of communication.

Claim 10 (Previously presented): A torque transducer comprising a torque transducer assembly as claimed in Claim 8 further comprising a signal processing unit connected to said means for communication by an electrical cable, said signal processing unit comprising a circuit into which the magnetic field sensor is connected through the cable, the circuit being operable to output signals representing sensed torque.

Claim 11 (Previously presented): A transducer as claimed in Claim 10 in which the signal processing unit is operable to process pulse signals representing pulses of torque and is responsive to the amplitude of each pulse signal with reference to the quiescent level on which it is imposed.

Claim 12 (Previously presented): An electrical power generator comprising a

permanent magnet disposed to move freely back-and-forth along a predetermined path between prescribed limits, a coil winding through which the predetermined path extends, the magnet and coil being so arranged that back-and-forth movements of the magnet with respect to the coil generates electromagnetic frequencies in the coil, and a rectifier arrangement for deriving voltage of a given polarity from the electromagnetic frequencies.

Claim 13 (Original): An electrical power generator as claimed in Claim 12 in which at least one of said prescribed limits is defined by a resilient stop device from which the permanent magnet impinging thereon rebounds.

Claim 14 (Previously presented): An electrical power generator as claimed in Claim 12 in which said coil is wound about a portion of said predetermined path, said magnet having north-south poles aligned on said path and said prescribed limits are spaced from respective ends of said path portion.

Claim 15 (Original): An electrical power generator as claimed in Claim 12 wherein the spacing between the prescribed limits and respective ends of said path portion is not less than half the length of the magnet.

Claim 16 (Previously presented): An electrical power generator as claimed in Claim 14 in which said coil has a length along said predetermined path about equal to the length of the magnet.

Claim 17 (Previously presented): An electrical power generator as claimed in claim 12 in which said predetermined path is straight.

Claim 18 (Previously presented): An electrical power generator as claimed in claim 12 further comprising a tube in which the predetermined path extends, the magnet being disposed within the tube and the coil being wound about a portion of the tube.

Claim 19 (Previously presented): An electrical power generator as claimed in Claim 18 in which at least one of said prescribed limits is defined by a resilient stop device from

which the permanent magnet impinging thereon rebounds and in which the resilient stop device is located within the tube.

Claim 20 (Previously presented): An electrical power generator as claimed in claim 12 in which said rectifier arrangement comprises a full-wave rectifier connected across said coil.

Claim 21 (Previously presented): A pulsed-type power torque tool to which an electrical power generator is mounted, the electrical power generator comprising a permanent magnet disposed to move freely back-and-forth along a predetermined path between prescribed limits, a coil winding through which the predetermined path extends, the magnet and coil being so arranged that back-and-forth movements of the magnet with respect to the coil generates electromagnetic frequencies in the coil, and a rectifier arrangement for deriving voltage of a given polarity from the electromagnetic frequencies, whereby the magnet is reciprocated back-and-forth along said predetermined path with respect to the coil by the vibration of the power torque tool when in operation.

Claim 22 (Previously presented) A torque transducer assembly comprising:

a housing having an opening therethrough;

a torque transmission shaft disposed in said housing for rotation about an axis extending through said opening, said shaft having a first portion supported in an annular bush secured to the housing and from which first portion and output portion of the shaft projects,

said first portion having a torque transducer element integral therewith, or carried thereby, to emanate a magnetic field dependent on the torque in the shaft, a magnetic field sensor arrangement embedded in said bush adjacent said element for providing a torque-dependent signal,

said shaft having a second portion distal said output portion and at least partially contained within said opening,

said second portion being of larger cross-section then said first portion and abutting said bush;

first means for locating said second portion to rotate with respect to said housing; and

second means for applying axial force between the housing and said second portion to maintain same in abutment.

Claim 23 (Original): A torque transducer assembly as claimed in Claim 22 in which said first means comprises a bushing located in a circumferential groove around said second portion and engaging an inner surface of said opening.

Claim 24 (Original): A torque transducer as claimed in Claim 23 in which said second means comprises a retainer ring secured in said opening to apply an axial force to said bushing.